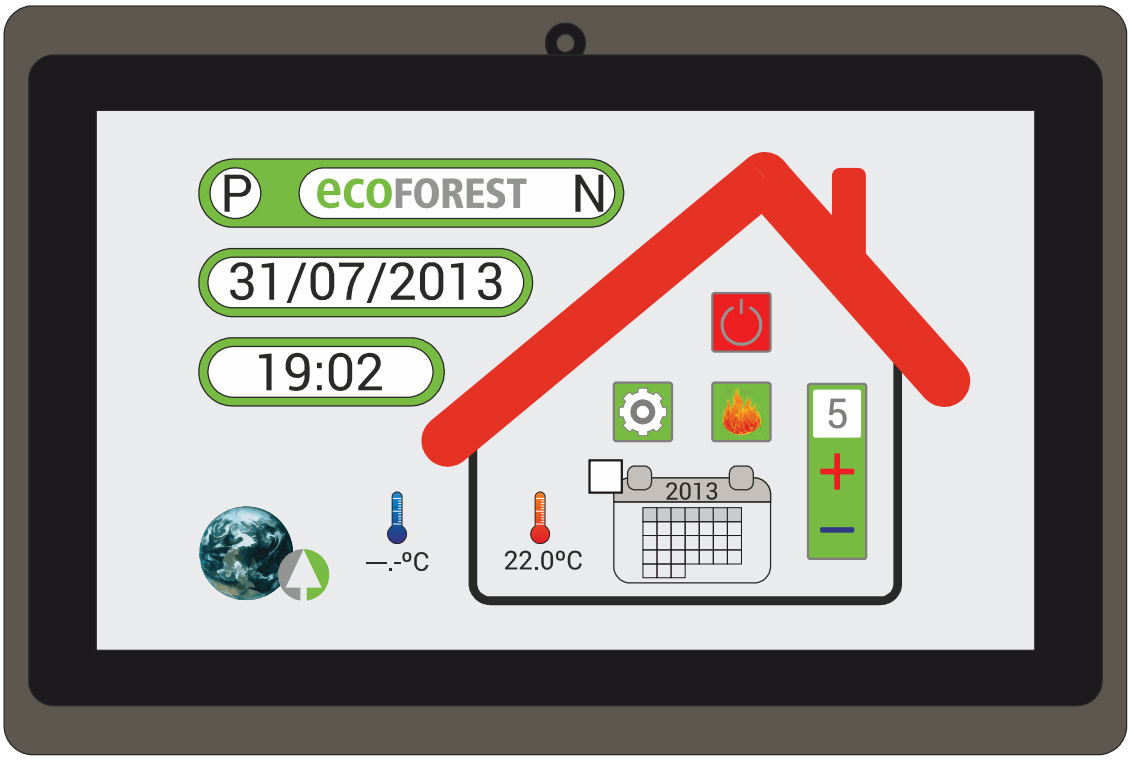
ecoFOREST

Manual de usuario.
User manual.
Manuel d'utilisation.
Manuale di istruzioni.
Manual do utilizador.



CE

UNE EN 14785

⚠ This appliance can be used by children aged from 8 years and above and people with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and if they understand the hazards involved. Children shall not play with the appliance. **Cleaning and user maintenance** shall not be made by children without any supervision.

⚠ The glass door and some other surface areas of the appliance may reach high temperatures.

⚠ **WARNING:** Do not open the door while the appliance is operating.

⚠ Read carefully this manual before using the appliance. Only that way, the best performance and maximum safety will be got during its use.

1. OPERATION.

Once the stove has been installed as indicated in the installation and maintenance manual, it shall be plugged in, the electronics shall be operative within 30-40 seconds.

1.1. Control panel detail.

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①	Ecoforest Tablet.
②	7”Tablet visual screen.
③	Mini OTG USB connection.
④	Power tablet.
⑤	Shutdown or locking button.
⑥	Volume + / -

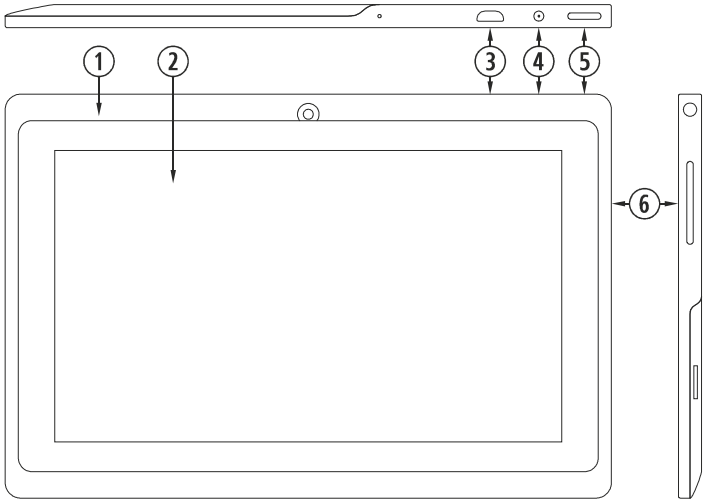

Figure 1

1.2. Network card set. Installation and connection.

The necessary elements for installing the network card are inside its box.

①	Antenna.
②	Network card.
③	Magnet connection base.

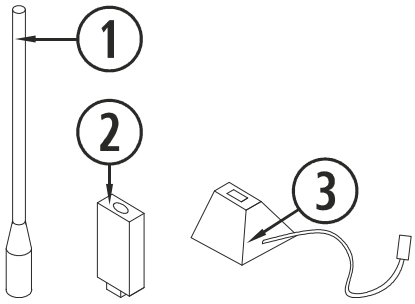

Figure 2

In order to install the antenna it shall be screwed into the network card.

①	Antenna.
②	Network card.
③	Installed Network card and antenna.

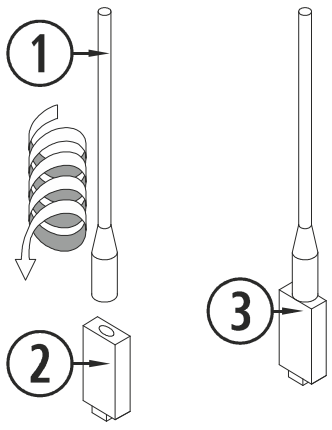

Figure 3

Once such operation is completed, the network card shall be connected on the provided base (it only has a connection position), placing such base in the location specified in the installation and maintenance manual, and it will remain stationary thanks to its magnetic base.

①	Set connection direction.
②	Magnetic base.

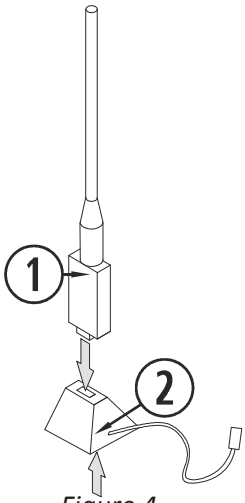

Figure 4

EN

1.3. Charging the battery and Turning on the Tablet.

Before starting working with the Tablet, it is advisable to charge it first so it can work wireless.

Thus, the charger in the box shall be plugged into a 230/240 ~50Hz electrical outlet and the other end shall be connected to point ④ (see previous section) when the word "charged" is shown in the screen it can work wireless. Should we wish to use the tablet connected to the charger, we can do it without any problems, always bearing in mind it will take longer for the charge to be completed.

It shall be turned on like any other similar telephone or Tablet, that is to say, the power button (⑤) shall be pressed during 3 seconds, after this operation we shall wait until the operative system is charged.

1.4. Connection and synchronisation with the stove.

Tablets are synchronised and configured by the manufacturer, but this section shall only be considered should there be any synchronisation failure or should there be any other stove we can access wireless or a free wi-fi network.

Thus, we shall go to Tablet settings and activate (yes) the Wi-Fi and when the available networks are shown, we shall select the network corresponding to our stove.

2. ICONS AND SCREEN EXPLANATION.

①	Main Screen.
②	Reading messages.
③	Power on / off
④	Configuration.
⑤	Fuel, time zone and language selection.
⑥	Fuel or temperature Increase-decrease.
⑦	Power on / off Programming.
⑧	Home indoor temperature.
⑨	Home outdoor temperature.
⑩	Ecoforest logo.

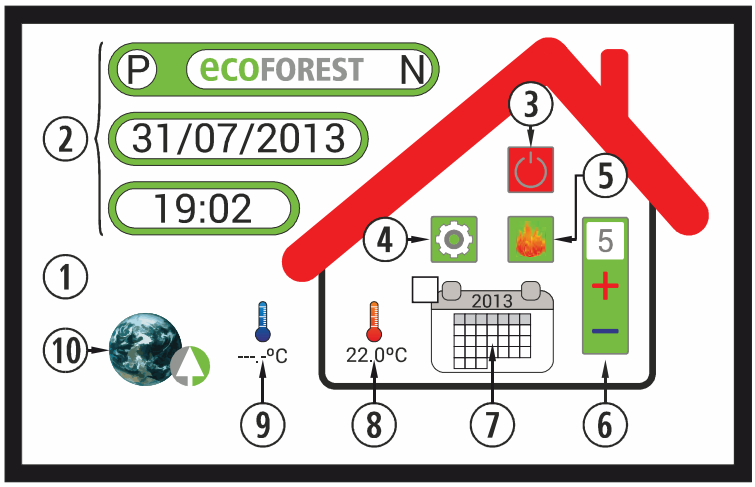

Figure 5

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2.1. Fuel, time zone and language selection (to activate this setting, the stove must be off and no alarm signal must be present).

We currently have a fast selection of the fuel to be used. Even though, we need to ask our supplier regarding the characteristics of the fuel to be used, as well as the need, if applicable, of installing any mechanical component. The selected fuel will appear highlighted in red.

This menu also offers the option of selecting the language and time zone.

①	Fuel, time zone and language selection.
②	Olive Stone.
③	Almond Shell.
④	Pellet.
⑤	Language selection.
⑥	Time zone.
⑦	Back to main screen.

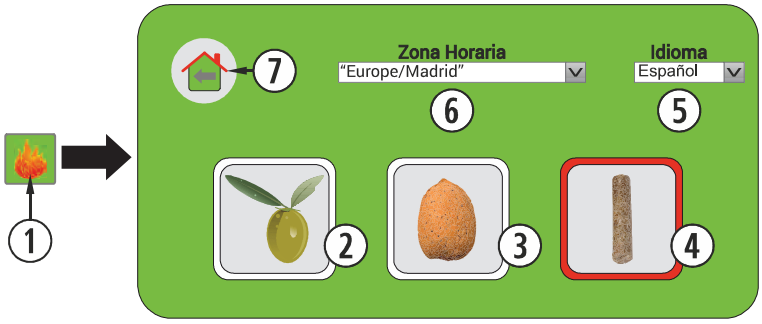

Figure 6

2.2. Reading messages.

①	Configurations.
②	Operating mode (P, M or E)*
③	Ecoforest Logo.
④	Safety message. (N or Axx)**
⑤	Current date.
⑥	Current time.
**** Section 2.5. Power, temperature or emergency.***	
***** Alarms (Axx).***	

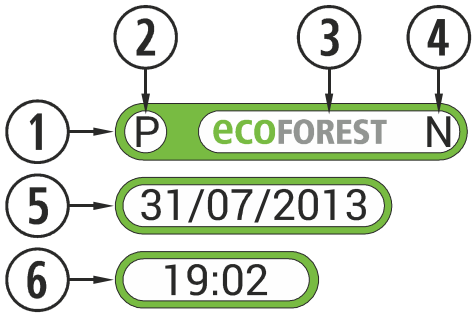

Figure 7

2.3. Turning the device on.

In order to turn the device on the icon ⏻ in the main screen shall be pressed; *its colour* will change during the different phases while turning it on.

Red	Firstly and when the stove is off and ready to be turned on, such icon shall be in red. If we press it, a new window will pop out asking us should we want to turn the stove on, if the user accepts, the electronics will shortly verify the engines and air depression and will start the device, turning the icon colour from red into yellow.
Yellow	When the icon is yellow it means the stove is being turning on with the extractor, fuel drop and ignition resistance in order to obtain the initial combustion.
Sky blue	Once there is a difference of temperature regarding the temperatures registered at the time of turning on the device, the icon will turn into sky blue, indicating the heating process has started, the ignition resistance will be turned off and a totally automated process will start in order to obtain the appropriate combustion for the subsequent operation.
Green	When temperature reaches 100°C in the gas output, and after 6 minutes from having turned the device on, the icon will turn into Green, indicating the ignition process is over and we will have access to the fuel drop setting or temperatures

adjustment. In case such temperature is not reached within 15 minutes, it will indicate alarm 99 (A099). See alarm table.

	Navy blue	It indicates it is waiting to be programmed. Read section 2.5.
	Orange	Such icon comes with the safety message signal. See section 5 alarms.

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2.4. Turning the device off.

In order to turn the device off the on/off icon shall be pressed and a new window will pop up asking us whether we want to turn off the stove, so we accept the action.

	Red/White (blinking)	The icon will blink alternating red and white and will start an automatic shutdown commanded by time and temperature. It shall take 15 minutes and the temperature of the gas output shall be equal to 80°C or lower. Should these conditions not be fulfilled, the shutdown will not be completed.

2.5. Operating modes (to activate this setting, the stove must be off and no alarm signal must be present).

Electronics have three operating modes, power, temperature and emergency. In order to know where such icon is located we can have a look at *Figure 7*. Graphics on how to select any of the modes referred to are bellowed included:

①	Configuration access Icon
②	Operating mode selection.
③	Different operating modes.
④	Back to previous mode.
⑤	Temperature Mode Configuration.
⑥	Back to main screen.

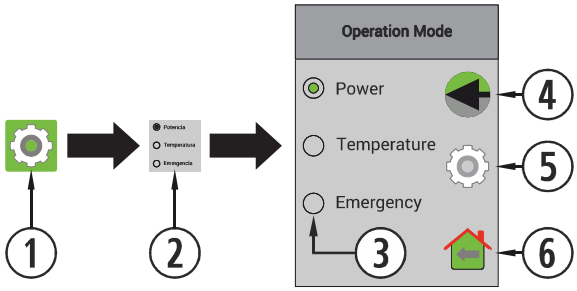

Figure 8

	P Mode: Power.	It is the configuration mode set *by default by the manufacturer*. At this level, we can select more or less fuel drop using + and – icons.
	P Mode: Power.	The regulation range goes from level 1 to 9, being 9 the maximum fuel drop level.

If we configure the operating mode in temperature, the P shall be replaced by a T the user may only activate this setting when the room sensor is connected:

	T Mode: Temperature.	This is the appropriate to operate in room temperature. By selecting this mode, the fuel drop value will be replaced by an operating room temperature. It is important to specify we need a room sensor in order to operate in this mode.

T Mode: Temperature. The regulating range goes from 12°C to 35°C, being the latter the maximum adjustable temperature.

In order to activate the temperature mode, the main screen configuration icon shall be press as indicated in *figure 8*.

The temperature selection is password protected, once the user name and password are introduced the option of remembering the password shall display, which we will accept or deny, according to how we use our stove. Due to safety reasons, Ecoforest advises not to memorise such data.

①	Temperature mode selection.
②	Configuration access Icon.
③	Get in touch with your distributor.

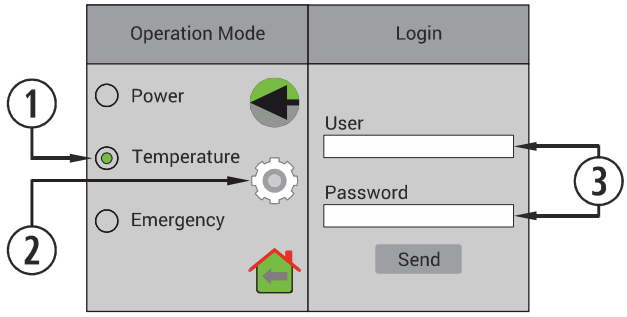

Figure 9

Once we have introduced the user name and password we will have access to the sensor type and function selection screen. The manufacturer has selected the option “None”. We will activate the temperature function, making sure the temperature sensor is connected to the communications port (DB9). The temperature differential option shall only be used if we are aware our home has been duly isolated.

The operation is really simple, configuring the operating temperature in the programming template, even selecting different temperatures per each operating hour, always in a coherent way. The electronics will look for the indicated temperature.

①	Sensor type activation.
②	Temperature differential Configuration.
③	Change from minimum mode to on/off.

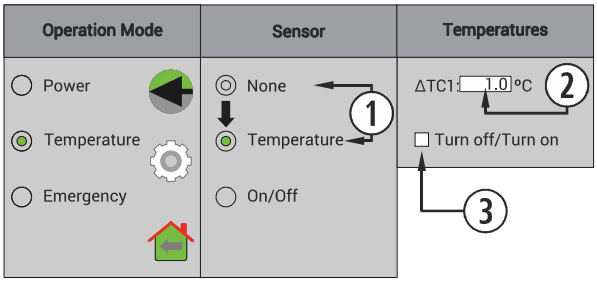

Figure 10

Should the operation be represented in a graphic, it would be as follows:

①	The user turns on the stove manually.
②	Target temperature selected in the main menu.
③	ΔTC1 by default 1°C *(See Figure 10).*
④	It changes to level 1 (minimum).
⑤	It changes to working level 9.
⑥	The user turns off the stove manually.

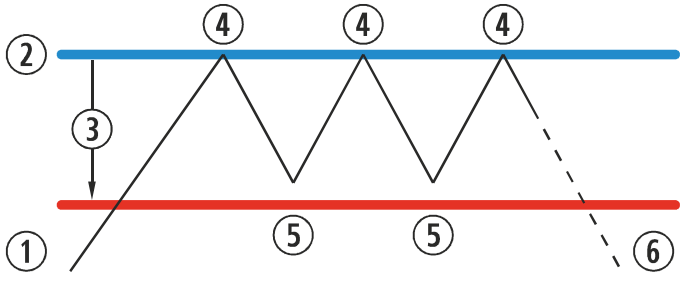

Figure 11

When we activate the turning on/off depending on temperature, the differentials shall be configured to start and stop the stove. This operating mode is only advised for duly isolated homes.

①	Activating the turning on/off function.
②	Configuring the temperature differential to turn the device on/off.

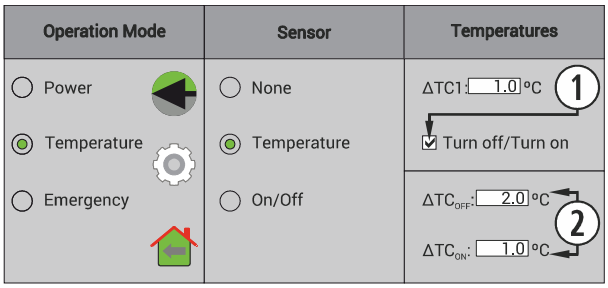

Figure 12

Should the operation be represented in a graphic, it would be as follows:

①	The user turns on the stove manually.
②	Target temperature selected in the main menu.
③	ΔTC1 by default 1°C *(See Figure 10).*
④	It changes to level 1 (minimum).
⑤	It changes to working level 9.
⑥	ΔTC_{OFF} Temperature difference for turning the device off.
⑦	Turning off the stove using the room temperature.
⑧	ΔTC_{ON} Temperature difference for turning the device on.
⑨	Turning on the device following the temperature order.

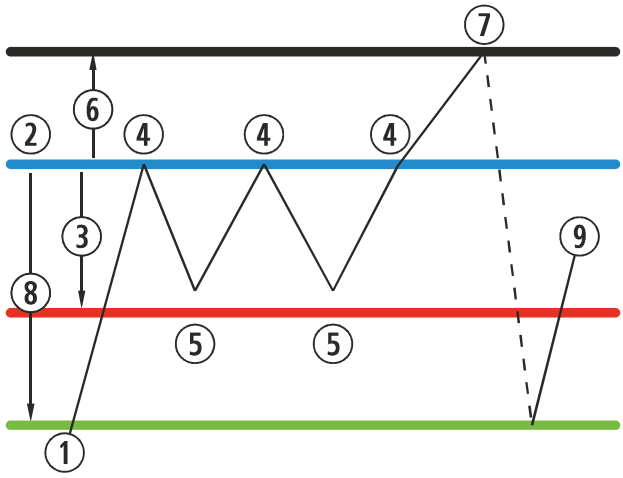

Figure 13

When the stove is off using this temperature mode and it is ready to be restarted, the following icon shall appear on the main screen:

Navy blue — The icon will remain in navy blue to indicate the stove has been stopped, waiting to be started, either after being programmed or according to temperature.

2.6. ON/OFF Mode.

The ON/OFF Mode is meant to operate a thermostat or contact. It shall always operate together with the appropriate connection, such connection shall always be voltage-free, and that is to say, the contact brought to the stove shall be intended to work using this mode.

The option of minimum level is available, which is de adequate option to connect a room thermostat with wire or wireless; and the stove will vary the operation level when the contact is locked, and when it is open the stove will be changed to the minimum.

The function of turning on and off the device through the contact shall be operated with an optoinsulated port and its use is only advisable with a maximum of being turned on twice a day and turned off twice a day.

①	Activation of the On/Off sensor function.
②	Lowering the stove to the minimum (It does not turn off).
③	To turn on/off through a contact.

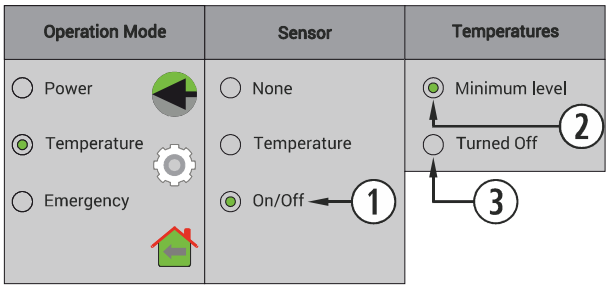

Figure 14

2.7. Emergency mode.

This mode shall only be used in case of emergency, since it does not monitor the air intake depression, fuel modulation. The convector will operate at a maximum power from the beginning.

In order to activate such mode, the following steps shall be followed:

①	Configuration access icon
②	Operating mode selection icon.
③	Emergency mode.

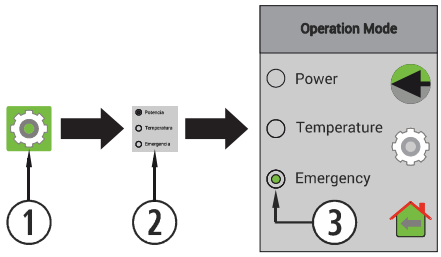

Figure 15

The icon represented below will be displayed on the main screen:

E Mode: Emergency. ***TO BE USED ONLY IN CASE OF EMERGENCY OR WHEN INDICATED BY S.A.T.***

3. POWER ON/OFF PROGRAMMING.

Templates may be used to programme the stove se puede realizar de forma semanal renovable, programmes registered by the manufacturer, which can be totally configured by the user, in a personalised way by selecting the time, temperature and fuel drop range. We can programme hasta 60 days ahead from the current date.

Such programming shall always be performed graphically, configuring the three parameters easily and quickly.

Thus, we have to press the calendar-shaped icon. Once the desired programming has been completed, either using a template or a specific personalized programming, we will activate such programming by pressing point ④. Such point shall be deselected in order to disabled the programming.

①	Access to programming.
②	Current year.
③	Disabled Programming.
④	Enabled Programming.

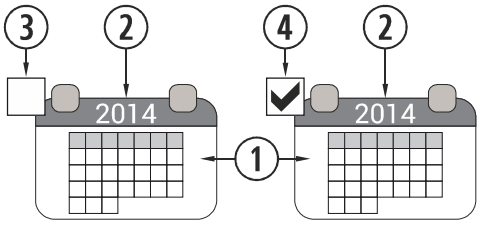

Figure 16

By pressing the before mentioned icon, we will have access to the programming templates screen.

①	Current calendar.
②	Template selection and configuration.
③	Weekly Schedule.
④	Back to main screen.

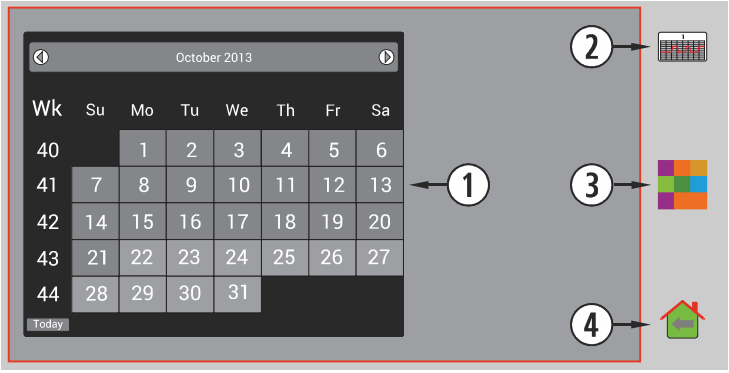

Figure 17

In order to select the daily schedule, we only have to press the day we want to programme, for instance the 22nd of October of 2013 and a new screen will be displayed as shown below:

①	Current calendar, with programmable days.
②	Predefined schedule for the selected day.
③	Modifying the programming predefined for a certain day.
④	Schedule configuration.
⑤	Weekly programming using schedules.
⑥	Back to main screen.

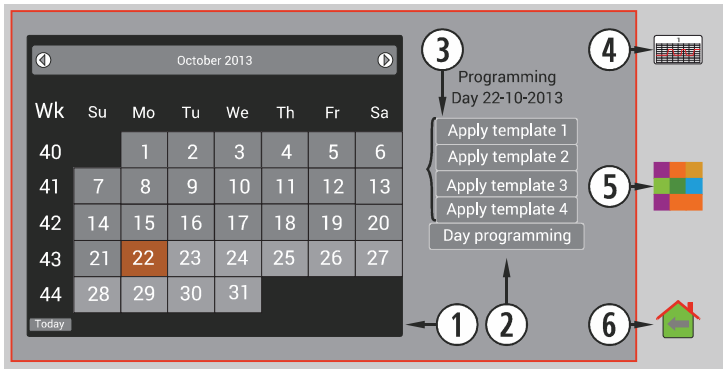

Figure 18

The main differences between point ② and point ③ is that, the first one includes programmes predefined by the manufacturer, which, even though they are modifiable, they are already memorised so the user can apply it easily. The "daily programming" will let us modify the schedule predefined for the selected day.

If we only want to programme a certain day, we have to press the icon indicating "Daily programming" (②), and we will have access to the programming schedule predefined for the selected day:

①	Indication of the programming we are about to perform.
②	Programming time (from 00 to 23h).
③	Temperature Selection.
④	Operation level or disabled time.
⑤	Save schedule ***(IMPORTANT)***
⑥	Back to previous screen.
⑦	Back to main screen.

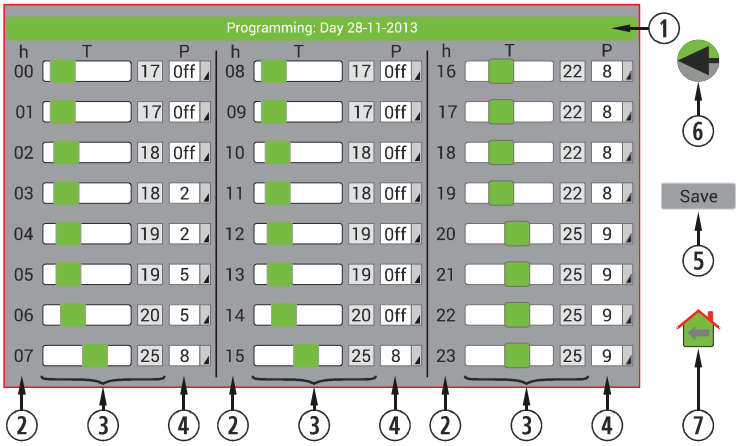

Figure 19

In the daily Schedule programming, we have to select at what time we want the device to be turned on (②), temperature may be selected using the scroll bar or pressing the temperature button, after which a keyboard will be displayed in order to manually introduce the temperature (③) provided we are working with room temperature mode (see section 2.5), the power the stove is working with. If we select "Off", the stove will not be turned on at that time and, finally, we have to ***save*** such programming and activate the calendar on the main screen *(See Figure 16).*

3.1. Programming schedules.

Within the schedule programming, we have two options: having access to one of the schedules as configured by the manufacturer (1, 2 and 3) or configuring a personalized schedule (4).

Schedules 1, 2 and 3, are configured by the manufacturer so the users can programme easily. However, it must be highlighted they are variable, that is to say, their parameters may vary.

Schedule 4 is a blank schedule the client may adapt to their working needs.

In order to configure any of the schedules, the desired Schedule shall be selected and the desired parameters shall be varied or configured in the same way as applied to the daily programming explained in the previous section.

Is important to validate such programming by selecting the saving option (point ⑤, figure 19) after the programming has been performed.

①	Schedule 1, 2 3 and 4.
②	Back to previous screen.
③	Back to main screen.

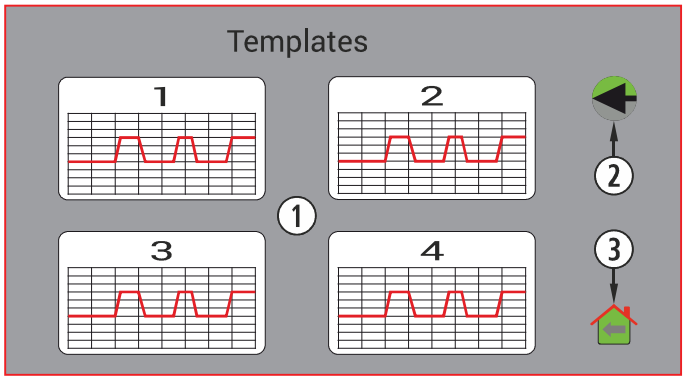

Figure 20

3.2. Weekly programming using schedules.

In order to have access to the weekly programming we have to press its icon *(Figure 17)* and we will have access to the programming screen. There we shall indicate which schedule we want to use for each week day. We have to ***save*** the programming and after, we have to enable the programming as indicated in point ④ of *Figure 16*.

Esta nueva plantilla semanal se aplicará a todos los días a partir del día actual.

①	Access to weekly selection.
②	Schedule selection.
③	Week days to be programmed.
④	Save Configuration Icon.
⑤	Back to previous screen.
⑥	Back to main screen.

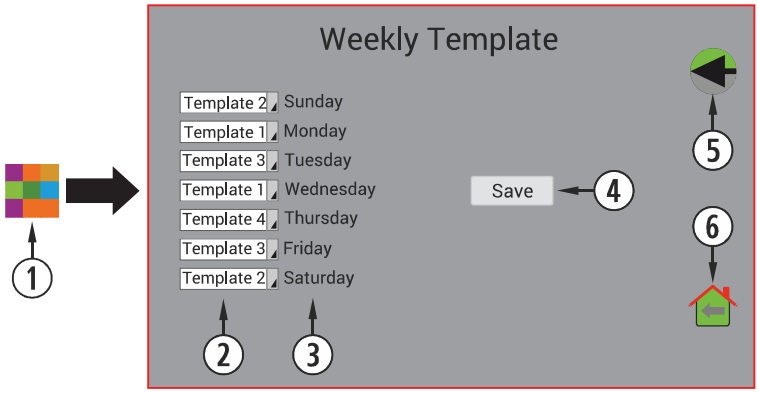

Figure 21

4. DATA VISUALISATION MENU.

①	Data visualisation access icon.
②	Data visualisation Screen.
③	Back to main screen.
④	Operational mode selection.
⑤	Water installation access Icon.
⑥	Access to menu 3 Configuration (Password).
⑦	Extractor settings, etc. access icon.
⑧	Software licenses and versions.

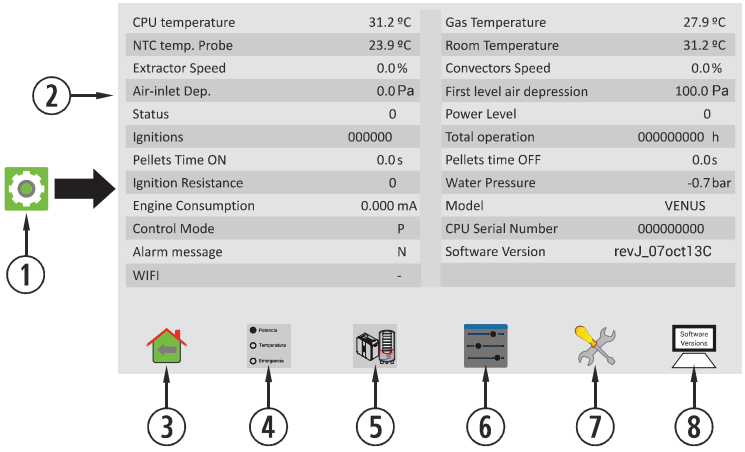

Figure 22

The visualised messages are below explained:

Message on the screen	***Description***	***Range.***
NTC sensor. Temp	Temperature detecting the convector operation (air models) or the water circuit (water models.)	-10 to 70°C air models. -10 to 83°C in water
Gas temperature	Gas outcome temperature.	-10 to 250°C, according to models.
CPU temperature	CPU Internal temperature	-10 to 65°C

Room temperature	Room temperature, only if the room sensor is connected.	-10 to 35°C
Extractor Speed	Voltage percentage (according to the power grid).	0 to 100%
Convector Speed	Voltage percentage (according to the power grid) received by the convection fan.	0 to 100%
Air intake Dep.	It is the pressure detected in the air intake pipe.	0 to 150Pa (according to model).
First air dep. level	Value recorded by the manufacturer.	70 to 150Pa (according to model).
Status	Operational status*	from -4 to 20 (check with SAT).
Power level	Fuel drop level	from 1 to 9
Power on	Number of times the stove has been turned on.	Counted from status 0.
Total operation	As the name implies, number of operational hours of the stove.	Counted hours from status 0.
T. pellet ON	Seconds during which the engine works without stopping.	It varies depending on the power level.
T. pellet OFF	Time during which the engine remains off.	It varies depending on the fuel quality.
Power on Resistance	Power on (1) or off of the resistance (0).	It varies from 0 to 1
Water pressure	Water pressure in the hydraulic circuit (only water models).	Water pressure in bars
Consumption of the motors	Average Electrical consumption of the motors during the operation.	Consumption in milliamps.
Model	Model of our stove.	It varies depending on the model.
Control mode	Operational mode according to power (P), temperature (T) or emergency (E).	See section 2.5 et seq.
CPU Serial number	CPU Serial number, also written in the label of the CPU.	It varies depending on CPU.
Alarm message	Alarm message (Axx).	See alarm table.
Software version	CPU Software version	It varies depending on the CPU.
WIFI	EcoforestXXXXXXXX	Stove SSID

Explanation of the different icons of the data visualisation menu:

Operating modes — Please, see explanation in section 2.5.

Water models Configuration — *Proximately for water models.*

Configuration — Access is password protected (Please, check with SAT). It gives access to different verification processes such as the data visualization menu and operating parameter setting, such as extractor offset, depression, ON Pellet times and power level.

Configuration — It gives access to different operating parameters verification and/or activation processes. It is advisable to check with the technical service (SAT).

Software Information. — Information on the different software versions used.

5. ALARMS.

In the event of an error in the network card or tablet, the user can still turn the stove on or off by pressing the pushbutton. In order to turn the stove on, the button must be pressed for 5 seconds (10 seconds if what we want is to turn the stove off). The location of this pushbutton depends on the model. In order to find it, please refer to section ***4*** of the installation and maintenance manual.

EN

Orange

This icon comes together with the safety message signal Axxx, see *Figure 7* section ④. It may indicate a failure of the stove sensors or engines. Please, see table included below.

Alarm	***Description***	***Solution***
A000	Aparecerá si se desenchufa con una alarma activa.	NO desenchufar, utilice el pulsador de seguridad.
A001	Low air intake depression.	Cleaning the stove. Puerta abierta. Tubo de salida de gases sucio.
A002	High air intake depression.	Excess of air during the installation.
A003	Minimum gas output temperature.	The stove run out of pellet.
A004	Maximum gas output temperature.	Maximum operating temperature has been reached. Dirty stove. Too intensive use.
A005	Minimum NTC temperature.	Badly planned installation in terms of space. Boiler working at low power levels. Disconnected NTC.
A006	Maximum NTC temperature.	Air in the circuit. Little dissipation of the energy generated. Too heavily used. Shortcut in NTC.
A007	Minimum water pressure.	Filling the heating circuit. Disconnected Pressure switch. Broken Pressure switch
A008	Maximum water pressure.	Lowering operating pressure between 1.2 and 1.5 bar Installing a bigger expansion vessel. Air in the circuit.
A009	Minimum room temperature.	Low temperature in the room. Disabling the room sensor. Lowering operating pressure.
A010	Maximum room temperature.	Too much temperature in the room Disabling the room sensor. Increasing operating pressure.
A011	Minimum CPU Temperature.	CPU Temperature below the minimum.
A012	Maximum CPU Temperature.	Dirty stove. Dirty or broken convector. Inadequate installation of the gas output pipe.
A013	Motor currents below the minimum.	Reviewing motor connections.
A014	Motor currents above the maximum.	Reviewing motor short circuits.
A015	Depression air level too low.	Minimum depression operating conditions. Dirty stove. Dirty exhaust pipe. Housing door or ash box incorrectly closed. Cleaning outlet left open.
A016	Maximum gas temperature alert	It has reached the gas output safety temperature

		and the pellet will drop.
A017	Maximum NTC temperature alert.	It has reached the safety water temperature and the pellet will drop.
A018	El extractor se pone al 100% y no alcanza la depresión mínima de trabajo de forma continuada.	Stove/heater dirty. Need to perform maintenance work.
A019	Extractor de la salida de gases al 100%	Stove/heater dirty. Need to perform maintenance work
A020	Error en sondas.	Possible sensor xchange.
A099	Lack of pellet. No alcanza la temperatura mínima de salida de gases 80 °C.	Filling the hopper. Stopped gear motor. The safety thermostat has tripped.